

Date: Tuesday, 5/23/2006 8:31:17 AM
 User: Kim Johnston

Process Sheet

split-2

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : BLADE
 Job Number : 27186
 Estimate Number : 10327
 P.O. Number : N/A Part Number : D2741
 This Issue : 5/23/2006 S.O. No. : N/A Drawing Number : D2741 REV C
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : MACHINED PARTS Drawing Revision : C
 Previous Run : 25938 Material : N/A
 Due Date : 6/15/2006 Qty: 30 Um: Each
 Written By : SEE COMMENT BELOW
 Checked & Approved By : 06.05.23
 Comment :
 Est Rev: B 00.11.15 Removed P/O turning - in house
 processEC
 Est Rev: E 06-03-20 As Per Rev C
 JLM
 Est Rev: F 06.04.20 Added grinding after heat treating EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M4130NB0500X03000 4130 Bar 0.5 x 3.0"



Comment: Qty.: 1.2118 f(s)/Unit Total: 36.3542 f(s)

4130 BAR 0.5 x 3.0"

Material: 4130 steel bar 0.50" x 3.00"

Batch: 17100310

ml 06/05/27 24

2.0 BAND SAW BAND SAW



Comment: BAND SAW

Cut blanks 13.850" long +0.063" -0.000"

ml 06/05/27 24

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine per folio FA108

ml 06/05/29 24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Tuesday, 5/23/2006 8:31:17 AM
User: Kim Johnston

Process Sheet

slip

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BLADE

Job Number: 27186

Part Number: D2741

Job Number:



Seq. #:	Machine Or Operation:	Description :
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4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

mk 06/05/29 24

5.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

MS 06/06/06 24

6.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1
1-Deburr
2-Bend per Dwg D2741

FF 06/07/13 24
SB 06/07/12 24

7.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

Joe 07.13 24

8.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: *1678*
Harden material as per Dwg D2741
Min. Ultimate Tensile Strength = 152 ksi (30-40 HRC)
Min. Yield Tensile Strength = 141 ksi
Test report or Certification required

CZ 06/07/13

(24)

9.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive and Inspect for transit damage
Ensure Test report or Certification attached

Pug 7/28 24

10.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

Joe 08.02 24

11.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1

Grind off carbon deposits

m.f. 06/08/02 24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA:  Date: 06/08/04

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Tuesday, 5/23/2006 8:31:17 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BLADE

Job Number: 27186

Part Number: D2741

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3

a.m. 06-08-03

(24)

13.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

10/8/03 24

14.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

ST150

LB 06/08/03

(24)

15.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06/08/04

(24)

Job Completion



c206108104

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

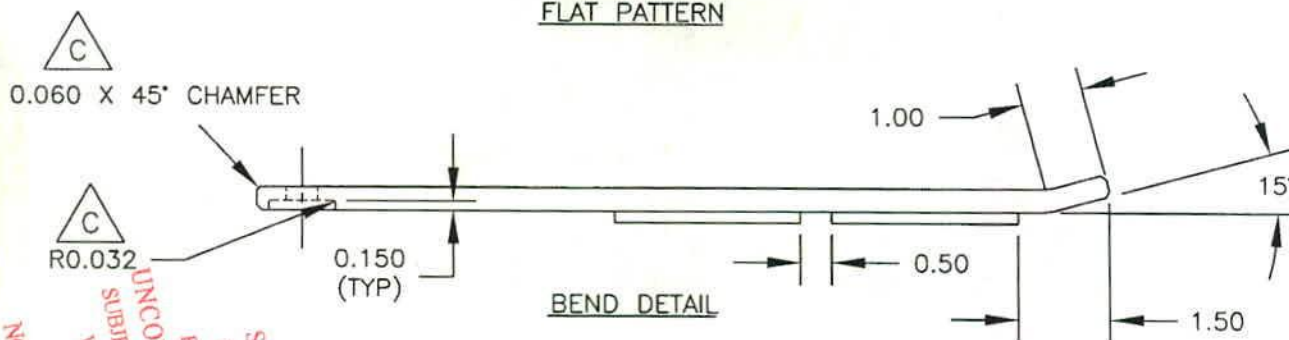
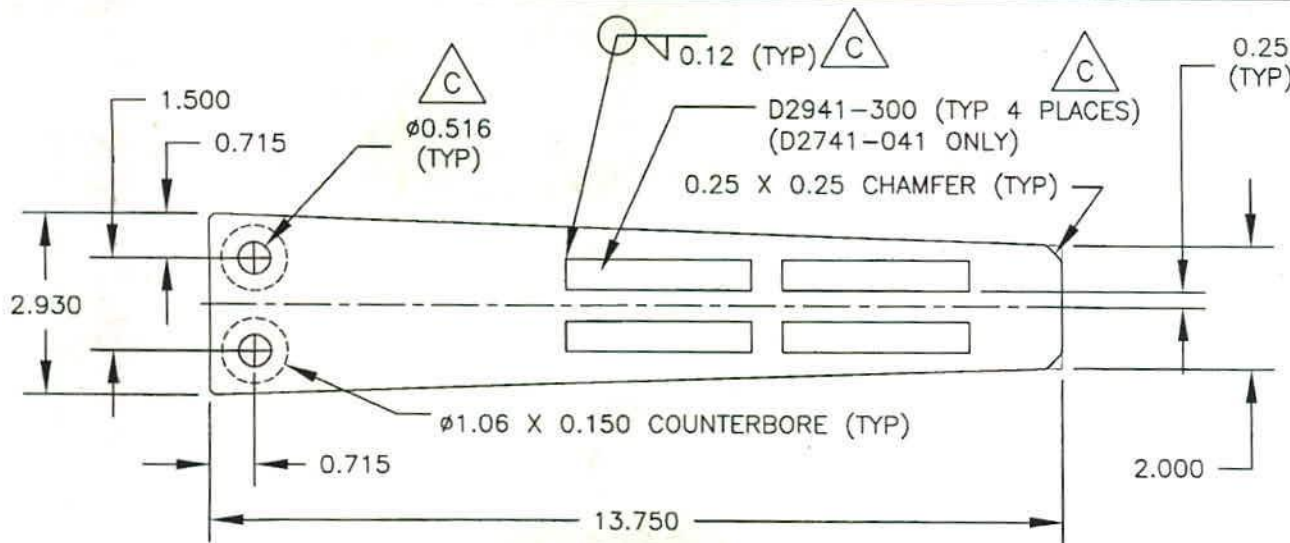
NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____



RELEASED
06 02 07

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
04	04	PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO.
06	06	D2741
DATE		TITLE
06.01.12		BLADE
A	98.04.16	NEW ISSUE
B	98.09.01	CHANGE C'SINK TO C'BORE
C	06.01.12	LARGER HOLE, ADD RADIUS AND CHAMFER ADD -041/-043 OPTIONS
		REV. C
		SHEET 1 OF 1
		SCALE
		1:3



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 27106
D2741 BLADE

- 1) MATERIAL: AISI 4130 STEEL 0.375 THICK
MIN. ULTIMATE TENSILE STRENGTH = 152 ksi (34-40 HRC)
MIN. YIELD TENSILE STRENGTH = 141 ksi
- 2) FINISH: POWDER COAT WHITE (REF. 4.3.5.2) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.030 TO 0.060
- 6) TO MAKE D2741-041, WELD D2941-300 (4) AS SHOWN ABOVE.
REMOVE POWDER COAT FROM SURFACE OF D2941-300
- 7) TO MAKE D2741-043, WELD 7560 HARDCOAT ROD INSTEAD OF D2941-300





VAC AERO
INTERNATIONAL INC.

RELEASE NOTE

GST No.: R105468102

OAK 77463-1



HEAD OFFICE
1371 SPEERS ROAD, OAKVILLE, ONTARIO
CANADA L6L 2X5
TEL: (905) 827-4171 FAX: (905) 827-7489



2009 WYECROFT ROAD, UNIT B
OAKVILLE, ONTARIO
CANADA L6L 6J4
TEL: (905) 827-7377 FAX: (905) 827-1380



QUEBEC DIVISION
7450 RUE VÉRITÉ STREET, ST. LAURENT, QUÉBEC
CANADA H4S 1C5
TEL: (514) 334-4240 FAX: (514) 334-6269

07/26/2006

MM/DD/YYYY

PAGE: 1

1DAR01

BILL TO: DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

SHIP TO: DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

K6A 1K7

K6A 1K7

DATE SHIPPED	SHIP VIA	F.O.B.
07/26/2006		ORIGIN
CUSTOMER P/O No.	JOB No.	TERMS
1678		COD

PART No.	DESCRIPTION	UOM	QTY ORD	QTY SHPD	TEST RESULTS
D2741	BLADE	EA	24	24	
<p>Process Specifications: Procedure: 4161 HARDENED PER DWG. D2741 TO 152 KSI MINIMUM HRC 34-40 MATERIAL: 4130</p>					
<p>100% HARDNESS TESTED 24 ps. 36/37 HRC</p>					
<p>70</p>					

I hereby certify that the material covered by this release note has been inspected and tested and conforms to all specifications relevant thereto in accordance with the conditions of the contract / or purchase order.

ON BEHALF OF VAC AERO INTERNATIONAL INC.

Sandra Freeman
Authorized Q.C. Inspector



VACUUM BRAZING · HEAT TREATING · SPECIAL PROCESSING · FURNACE EQUIPMENT

HEAT